Receipt date: 11/09/2007

7 S	ubstitute fo	r form 1449/PTO		-	Co	mplete if Known	•
					Application Number	10/566,263	
	1	NFORMATION	DISC	CLOSURE	Filing Date	September 28, 2006	
		STATEMENT E			First Named Inventor	Jeffrey RUBERTI	
	3	IAIEWIENI E Use as many she			Art Unit	1796	
		(Use as many sne	ets as net	.633a1y)	Examiner Name	William K. CHEUNG	
	Sheet	1	of	6	Attorney Docket Number	20780-016	

			U.S. PATENT DO	CUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (if known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/C.B./	A1	3,875,302	04/01/1975	Inoue	
	A2	4,472,542	09/18/1984	Nambu	
***************************************	A3	4,663,358	05/05/1987	Hyon	
	A4	4,772,287	09/20/1988	Ray	
00000	A5	4,904,260	02/27/1990	Stoy	
000	A6	5,047,055	09/10/1991	Bao	
000	A7	5,071,437	12/10/1991	Steffee	
	A8	5,260,066	11/09/1993	Wood	
	A9	5,288,503	02/22/1994	Wood	
	A10	5,534,028	07/09/1996	Bao,	
	A11	5,705,296	01/06/1998	Kamauchi	
	A12	5,731,005	03/24/1998	Ottoboni	
	A13	5,880,216	03/09/1999	Tanihara	
	A14	5,976,186	11/02/1999	Bao	
	A15	5,981,826	11/09/1999	Ku	
0000	A16	6,231,605	05/15/2001	Ku	
	A17	6,264,695	07/24/2001	Stoy	
0000	A18	6,268,405	07/31/2001	Yao	
	A19	2004/0171740	09/02/2004	Ruberti	
W	A20	2004/0092653	05/13/2004	Ruberti	

			FOREIGN PATENT	DOCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ^{5(# known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	. T ⁶
/C.B./	B1	WO 01/12107 AI	02/22/2001	LAMBRECHT	English	
/\J.\J./	B2	WO 02/054978 A2	07/18/2002	LAMBRECHT	English	
	В3	JP 04 338326A	11/25/1992	OKAMURA	W/English Translation	
	B4	JP 03215417A	09/20/1991	YAMAUCHI et al.	W/English Translation	
W	B5	EP 1229873	08/14/2002	MARCOLONGO	English	

	The second secon
Examiner	Date
	Considered
Signature	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. There office that issued the document, by the two-letter code (MIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Notice of the patent document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 197 and 198. The information is required to obtain or retain a herefit by the public which is to file (and by the LISPTO) to process) and the process of the proces symbols as indicated on the document under WIPO Standard ST.16 if possible. "Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08B (04-07)

Approved for use through 09/30/2007. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitut		'			Complete if Known
Substitut	INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) eet 2 of 6	Application Number	10/566,263		
				Filing Date	September 28, 2006
1	INFORMATI	ION D	ISCLOSURE	First Named Inventor	Jeffrey RUBERTI
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Art Unit	1796	
				Examiner Name	William K. CHEUNG
Sheet	2	of	6	Attorney Docket Number	20780-016

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
/C.B./	catalog. etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. C1 AAOS, Musculoskeletal Conditions in the U.S., Feb. 1992-1988, 1992, AAOS C2 Bao, Q.B., & Yuan, H. A., "Nucleus Replacement," Spine, Vol. 27, No. 11, 2002, 1247 C3 Bao, Q. & Yuan, H.A, "Prosthetic Disc Replacement: The Future?," Clinical Orthon and Related Research, No. 394, pp 139-145, 2002 C4 Zeegers, W. S., et al, "Artificial disc replacement with the modular type SB Charit results in 50 prospectively studied patients," Eur Spine J, 8:210-217, 1999 C5 Wiesel, S.W. et al, "Industrial Low-Back Pain-A Prospective Evaluation of a Stand Diagnositic and Treatment Protocol," SPINE, Vol. 9, No. 2, 199-203, 1984 C6 Vago, R., "Novel Natural Materials for Bone Substitutes and Hard Tissue Remode http://www.bgu. ac. il/bgn/bone.html C7 Bao, Q. et al, "The artificial disc: theory, design and materials," Biomaterials Vol. 12, (1996) 1157-1167	AAOS, Musculoskeletal Conditions in the U.S., Feb. 1992-1988, 1992, AAOS	
00000	C2		
000000000000000000000000000000000000000	C3	and Related Research, No. 394, pp 139-145, 2002	
000000000000000000000000000000000000000	C4	Zeegers, W. S., et al, "Artificial disc replacement with the modular type SB Charit III: 2-year results in 50 prospectively studied patients," Eur Spine J, 8:210-217, 1999	
00000000000	C5	Wiesel, S.W. et al, "Industrial Low-Back Pain-A Prospective Evaluation of a Standardized Diagnosite and Treatment Protocol," SPINE, Vol. 9, No. 2, 199-203, 1984	
000000000000000000000000000000000000000	C6	http://www.bgu.ac.il/bgn/bone.html	
	C7	Bao, Q. et al, "The artificial disc: theory, design and materials," Biomaterials Vol. 17, No. 12, (1996) 1157-1167	
	C8	Urushizaki, F. et al, "Swelling and mechanical properties of poly(vinyl alcohol) hydrogels," International Journal of Pharmaceutics, 58 135-142, 1990	
2000000000	C9	UPMC Surgeons Implanting Metal Cages into the Spine to Treat Chronic Low Back Pain, Neurosurgery News, 1999, University of Pittsburgh	
00000000000	C10	Takeshita, H. et al, "Gelation Process and Phase Separation of PVA Solutions as Studied by a Light Scattering Technique," Macromolecules 32, 7815-7819, 1999	
0000000000	C11	Oka, M. et al, "Development of artificial articular cartilage," Proc Instn Mech Engrs Vol. 214 Part H. 59-68, 2000	
0000000000	C12	Onuki, A. & Puri, S., "Spinodal decomposition in gels," Physical Review E, Vol. 59, No. 2, Feb. 1999, R1331-R1334	
X	C13	Mike, C., "FDA Approves Bone Graft," 2002, http://www.news.wisc.edu/view.html?get=7640	
000000000000000000000000000000000000000	C14	Takeshita, H. et al, "Small-angle neutron scattering studies on network structure of transparent and opaque PVA gels," Physica B 311 (2002) 78-83	
1/	C15	Lozinsky, V. I. et al, "Swelling behavior of poly(vinyl alcohol) cryogels employed as matrices for cell immobilization), Enzyme Microb. Technol, Vol. 18, 561-569, 1996	
	C16	Juarez, K.K. & An, H.S., "Artificial Disc Replacement," Spineuniverse.com	

Examiner	Date	
Signature	Considered	
ľ		
		Í .

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

form with next communication to applicant.

Applicant's unique citation designation number (optional).

Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete his form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Receipt date: 11/09/2007

10566263 - GAU: 4138

PTO/SB/08B (04-07) Approved for use through 09/30/2007. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Panerwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute t	INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) heet 3 of 6	Complete if Known			
				Application Number	10/566,263
				Filing Date	September 28, 2006
l ii	NEORMATIC	N D	ISCLOSURE	First Named Inventor	Jeffrey RUBERTI
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Art Unit	1796	
`				Examiner Name	William K. CHEUNG
Sheet	3	of	6	Attorney Docket Number	20780-016

	,		
<u> </u>	<u> </u>	NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium,	
Examiner Initials*	Cite No.1	catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
/C.B./	C17	Kawanishi K. et al, "Thermodynamic consideration of the sol-gel transition in polymer solutions," 35 th Annual Meeting of the Society of Polymer Science, Japan, 1986	
8	C18	"New Implants Offer Relief of Spine 2001, Medical Device and Diagnostic Industry	
C19 Takeshita, H., et al, "Spinodal Decomposition and Syneresis of PVA Gel," Macromolecu 2001, 34, 7894-7898			
0000	C20	Diwan, A. D. et al, "Current Concepts in Intervertebral Disk Restoration," Tissue Engineering in Orthopedic Surgery, Vol. 31, No. 3, pp 453-464, July 2000	
200000000000000000000000000000000000000	C21	Peppas, N. A. et al, "Physicochemical Foundations and Structural Design of Hydrogels in Medicine and Biology," Annu. Rev. Biomed. Eng., 02:9-20, 2000	
000000000000000000000000000000000000000	C22	Willcox, P. J., et al, "Microstructure of Poly(vinyl alcohol) Hydrogels Produced by Freeze/Thaw Cycling," Journal of Polymer Science: Part B: Polymer Physics, Vol. 37, 3438-3454 (1999)	
000	C23	Bray, J.C. & Merrill, E. W., "Poly(vinyl alcohol) Hydrogels for Synthetic Articular Cartilage Material," Biomed. Mater. Res., Vol. 7, pp. 431-443 1973	
000000000000000000000000000000000000000	C24	Stammen, J. A., et al., "Mechanical properties of a novel PVA hydrogel in shear and unconfined compression," Biomaterials, 2001 Apr 22 (8), 799-806, abstract only	
	C25	Bray, J.C. & Merrill, E. W., "Poly(vinyl Alcohol) Hydrogels. Formation by Electron Beam Irradiation of Aqueous Solutions and Subsequent Crystallization," Journal of Applied Polymer Science, Vol. 17, pp 3779-3794, 1973	
	C26	Hong, P, et al, "Solvent Effect on Structural Change of Poly(vinyl alcohol) Physical Gels," Journal of Applied Polymer Science, Vol. 69, 2477-2486 (1998)	
жананананананана	C27	Hong, P. et al, "Effects of Mixed Solvent on Gelation of Poly(vinyl alcohol) Solutions," Journal of Applied Polymer Science, Vol 79, Issue: 6, Date: 7 February 2001, Pages: 1113-1120	
000000000	C28	Hassan C. M. & Peppas N. A., "Structure and Morphology of Freeze/Thawed PVA Hydrogels," Macromolecule, Vol. 33, No. 7, 2472-2479, 2000	
000000000	C29	Griffith, S. L. et al, "A Multicenter Retrospective Study of the Clinical Results of the LINK" SB Charite Intervertebral Prosthesis," SPINE, Vol. 19, No. 16, 1842-1849, 1994	
	C30	Flory, P.J., "Principles of Polymer Chemistry," 1953, Ithaca and London: Cornell University Press	
V	C31	de Gennes, P.G., "Scaling Concepts in Polymer Physics," First ed. 1979: Cornell University Press, 72, 113-114	

Examiner	Date	
Signature	Considered	
ŭ		
	j	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

form with next communication to applicant.

Applicant's unique citation designation number (optional).

Applicant is to place a check mark here if English language Translation is attached.

Approant's unique citation designation humber (optional). Approant is to place a cliect many tale to legistrian large Planstandin's attacked.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Receipt date: 11/09/2007 10566263 - GAU: 4138

PTO/SB/08B (04-07)

Approved for use through 09/30/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

	Under the Pa	perwork	Reduction Act of 1995, no persons are	required to respond to a collection of	information unless it contains a valid OMB control number.
Substitute for	INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	Complete if Known			
		Application Number	10/566,263		
				Filing Date	September 28, 2006
1	VEORMATIC	N D	ISCLOSURE	First Named Inventor	Jeffrey RUBERTI
1	INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Art Unit 1796		
				Examiner Name	William K. CHEUNG
Sheet	4	of	6	Attorney Docket Number	20780-016

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
/C.B./	C32	Choi, J. H., et al., "Rheological Properties of Syndiotacricity-Rich Ultrahigh Molecular Weight Poly(vinyl alcohol) Dilute Solution," Journal of Applied Polymer Science, Vol. 82, 569-576 (2001)	
20000	C33	Doehring, T.C. et al, "Cyclic Load-Displacement Characteristics of Lumber Functional Spinal Units," 46 th Annual Meeting, Orthopaedic Research Society, March 12-15, 2000	
200000000000000000000000000000000000000	C34	Damshkaln, L. G., et al, "Study of Cryostructurarion of Polymer Systems. XV. Freeze-Thaw-Induced Formation of Cryoprecipitate Matter from Low-Concentrated Aquenous Solutions of Poly(vinyl alcohol), Journal of Applied Polymer Science, Vol. 74, 1978-1986 (1999)	
000	C35	Darwis, D., et al, "Characterization of poly(vinyl alcohol) hydrogel for prosthetic intervetebral disc nucleus," Radiation Physics and Chemistry 63 (2002) 539-542	
000000000000000000000000000000000000000	C36	Gomes, K. et al, "The Effect of Dehydration History on Associating Hydrogels for Nucleus Pulposus Replacement," Society for Biomaterials, 28 th Annual Meeting Transactions, 2002	
000000000000000000000000000000000000000	C37	Hassan C., M. et al, "Diffusional characteristics of freeze/thawed poly(vinyl alcohol) hydrogels: Applications to protein controlled release from multilaminate devices," European Journal of Pharmaceutics and Biopharmaceutics 49 (2000) 161-165	
000000000000000000000000000000000000000	C38	Elias, H.G., "Theta Solvents," Brandrup, J. and E. H. Immergut, Polymer Handbook 3rd Ed., John Wiley & Sons, NY 1989	
	C39	Hassan, C., M., & Peppas, N.A., "Cellular PVA Hydrogels Produced by Freeze/Thawing," Journal of Applied Polymer Science, Vol. 76, 2075-2078 (2000)	
dissensessessessessessessessessessessesses	C40	Lozinsky, V. I., et al, "Study of Cryostructuration of Polymer Systems, XIV. Poly(vinyl alcohol) Cryogels: Apparent Yield of the Freeze-Thaw-Induced Gelation of Concentrated Aqueous Solutions of the Polymer," Journal of Applied Polymer Science, Vol. 77, 1822-1831 (2000)	
	C41	Nakane, K., et al., "Properties and Structure of Poly(vinyl alcohol)/Silica Composites," Journal of Applied Polymer Science, Vol. 74, 133-138 (1999)	
V	C42	Hassan, C., M. et al., "Modeling of crystal dissolution of poly(vinyl alcohol) gels produced by freezing/thawing process," Polymer 41 (2000) 6729-6739	

Examiner	Date	
Signature	Considered	

ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS

Receipt date: 11/09/2007 10566

10566263 - GAU: 4138

 $\frac{\text{PTO/SB/08B}}{\text{Approved for use through 09/30/2007. OMB 0651-0031}}$

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				Complete if Known		
				Application Number	10/566,263	
1				Filing Date	September 28, 2006	
INFORMATION DISCLOSURE				First Named Inventor	Jeffrey RUBERTI	
	STATEMENT BY APPLICANT			Art Unit	1796	
(Use as many sheets as necessary)				Examiner Name	William K. CHEUNG	
Sheet	5	of	6	Attorney Docket Number	20780-016	

Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Т
/C.B./	C43	Hickey, A. S. & Peppas N.A., "Solute diffusion in poly(vinyl alcohol)/poly(acrylic acid) composite membranes prepared by freezing/thawing techniques," Polymer, Vol. 38 No. 24 1997 5931-5936	
000000	C44	Li, J. K., et al, "Poly(vinyl alcohol) nanoparticles prepared by freezing-thawing process for protein/peptide drug delivery," Journal of Controlled Release 56 (1998) 117-126	
000000000000000000000000000000000000000	C45	Lozinskii V. I. & Savina I. N., "Study of Cryostructuring of Polymer Systems: 22. Composite Poly(vinyl alcohol) Cryogels Filled with Dispersed Particles of Various Degrees of Hydrophilicity/Hydrophobicity," Colloid Journal, Vol. 64, No. 3, 2002, 336-343	
200000000000000000000000000000000000000	C46	Lozinsky, V. I. & Damshkaln L. G., "Study of Cryostructuration of Polymer Systems. XVII. Poly(vinyl alcohol) Cryogels: Dynamics of the Cryotropic Gel Formation, Journal of Applied Polymer Science, Vol. 77, 2017-2023 (2000)	
00000000	C47	Marolongo, M., et al, "Novel Hydrogel Copolymers for Intervertebral Disc Replacement," Sixth World Biomaterials Congress Transactions, 2000	
000000000000000000000000000000000000000	C48	Mongia, N.K., et al, "Mucoadhesive poly(vinyl alcohol) hydrogels produced by freezing/thawing processes: Applications in the development of wound healing systems," J. Biomater. Sci, Polymer Edn, Vol. 7, No. 12, pp. 1055-1064 (1996)	
000000000000000000000000000000000000000	C49	Narasimhan, B. & Peppas, N.A., "Molecular Analysis of Drug Delivery Systems Controlled by Dissolution of the Polymer Carrier," Journal of Pharmaceutical Sciences, Vol. 86, No. 3, March 1997	
	C50	Norton, B. K, et al, "Mechanical Evaluation of a Structural Hydrogel for Use as a Spinal Disc Nucleus," Sixth World Biomaterials Congress Transactions, 2000	
33300000	C51	Ogata, N., et al., "Poly(vinyl alcohol)-clay and Poly (ethylene oxide)-clay Blends Prepared Using Water as Solvent," Journal of Applied Polymer Science, Vol. 66, 573-581 (1997)	
***************************************	C52	Peppas, N.A. & Stauffer, S. R., "Reinforced uncrosslinked poly (vinyl alcohol) gels produced by cyclic freezing-thawing processes: a short review," Journal of Controlled Release, 16 (1991) 305-310	
0000000000	C53	Strawhecker, K.E. & Manias E., "AFM of Poly(vinyl alcohol) Crystals Next to an Inorganic Surface," Macromolecules, 2001, 34, 8475-8482	
000000000000000000000000000000000000000	C54	Strawhecker, K.E. & Manias, E., "Structure and Properties of Poly(vinyl alcohol)INA+ Montmorillonite Nanocomposites," Chem. Mater, 2000, 12, 2943-2949	
V	C55	Takahashi, N., et al, "Effects of cononsolvency on gelation of poly(vinyl alcohol) in mixed solvents of dimethyl sulfoxide and water," Polymer 44 (2003) 4075-4078	

Examiner Signature		Date Considered	
-			

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2

PTO/SB/08B (04-07)

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete fins form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Receipt date: 11/09/2007

10566263 - GAU: 4138

Approved for use through 09/30/2007. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Onder the Paperwork Reduction Act of 1993, no persons				re required to respond to a collection	n of information unless it contains a valid OMB control number.	
Substitute for form 1449/PTO				Complete if Known		
				Application Number	10/566,263	
				Filing Date	September 28, 2006	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			ISCLOSURE	First Named Inventor	Jeffrey RUBERTI	
			· · ·	Art Unit	1796	
				Examiner Name	William K. CHEUNG	
Sheet	6	of	6	Attorney Docket Number	20780-016	

	-		
Examiner Initials*	Cite No. 1	NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
/C.B./	C56	Wilke, H-J, et al, "Prosthetic Disc Nucleus Restores the Flexibility and Disc Height of a Disc After Nucleotomy," Sixth World Biomaterials Congress Transactions, 2000	
30000000	C57	Yamaura K., et al, "Gels of Syndiotacticity-Rich Poly(vinyl Alcohol)-Water/Dimethyl Sulfoxide or - Water/Ethylene Glycol Solutions," Journal of Applied Polymer Science, Vol. 34, 2347-2354 (1987)	
900000000000000000	C58	Yamaura, K. et al., "Properties of Gels Obtained by Freezing/Thawing of Poly(vinyl Alcohol)/Water/Dimethyl Sulfoxide Solutions," Journal of Applied Polymer Science, Vol. 37, 2709-2718 (1989)	
\$0000000000000000000000000000000000000	C59	Yokoyama, F., et al, "Morphology and structure of highly elastic poly (vinyl alcohol) hydrogel prepared by repeated freezing-and-melting," Colloid & Polymer Sci 264: 595-601 (1986)	
V	C60	Yu, Y, et al, "Preparation and properties of poly (vinyl alcohol) clay nanocomposite materials," Polymer 44 (2003) 3553-3560	

Examiner Signature	/Christopher Beccia/	Date Considered	01/22/2009
-----------------------	----------------------	--------------------	------------

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2 $\,$

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.